



EVINRUDE[®]
Johnson[®]



BATTERY CHARGING KIT

P/N 173358

Installation Instructions

PURPOSE

When installed on 1977 and later 9.9, 15, 25 and 35 Johnson[®] and Evinrude[®] outboard motors, this alternator kit provides 5 amp. battery charging.

INSTALLATION

1. Disconnect spark plug leads. Remove recoil starter assembly, 25 and 35 models only.
2. Remove flywheel nut, Figure 1, and flywheel using Universal Puller P/N 378103, Figure 2.

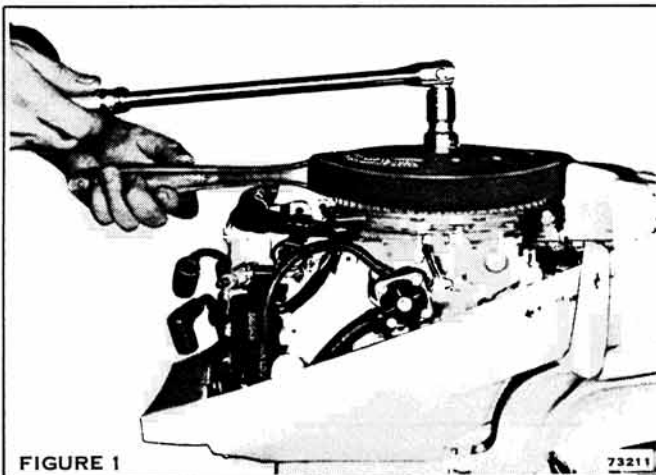


FIGURE 1

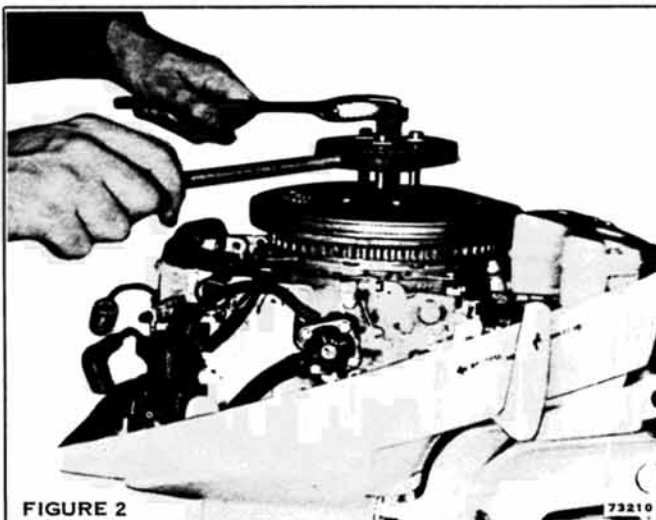


FIGURE 2

3. Remove armature plate leads from clamps, and disconnect 4 pin connector, Figure 3.

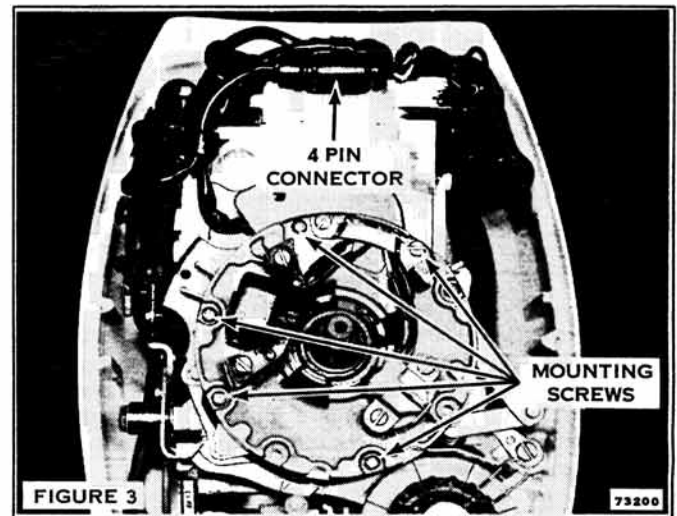


FIGURE 3

4. Loosen armature plate mounting screws and remove armature plate assembly. See Figure 3.
5. Remove leads from connector using Socket Remover P/N 322699, following procedures outlined in Section 4 of your service manual. See Figure 4.

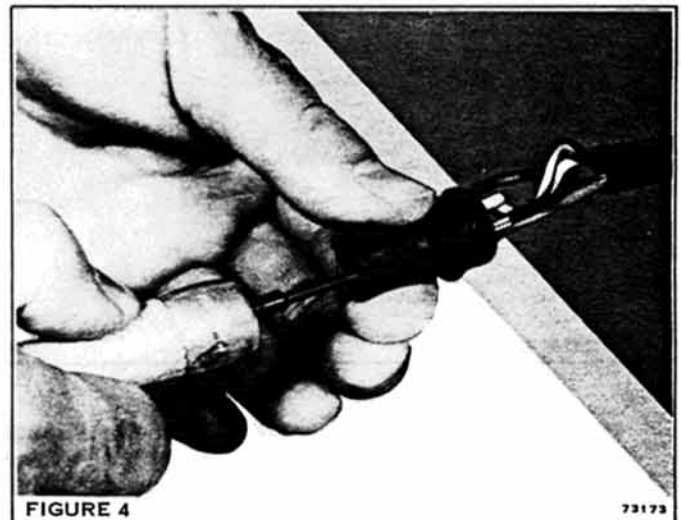
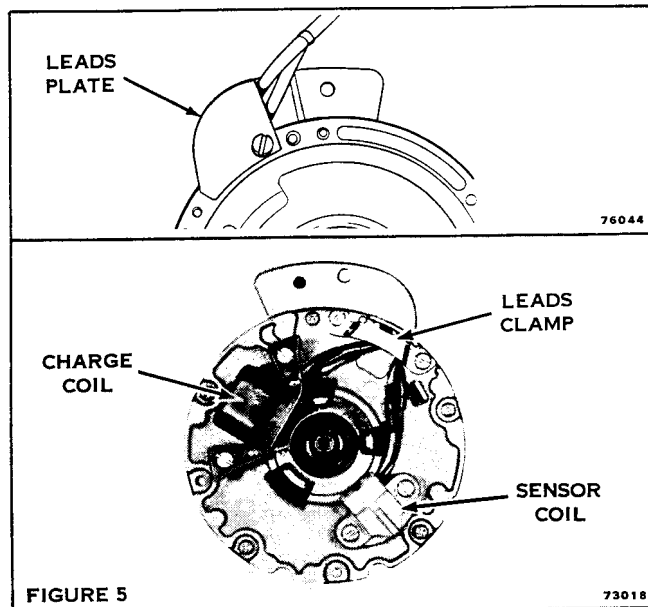
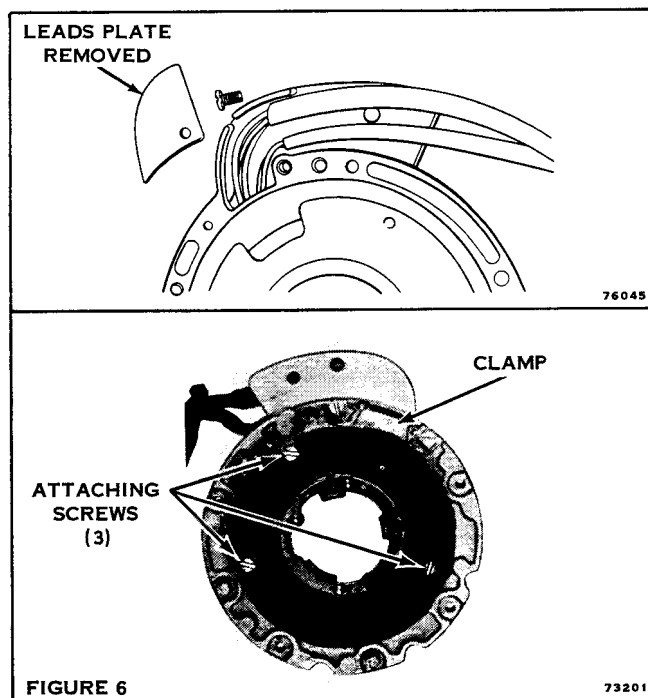


FIGURE 4

6. Remove leads clamp and plate from armature plate. See Figure 5. Note the position of leads under clamp and plate to simplify reassembly. Remove sensor assembly and charge coil assembly. See Figure 5.



7. Install the stator assembly from kit on armature plate with screws and lockwashers supplied. See Figure 6. Insert leads thru armature plate carefully placing wires in original position. Reassemble plate and lead clamp on armature plate. See Figure 6.

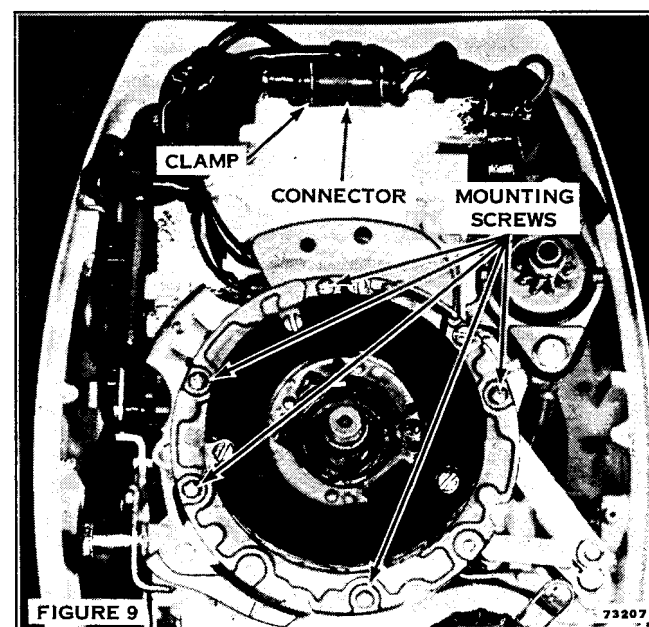
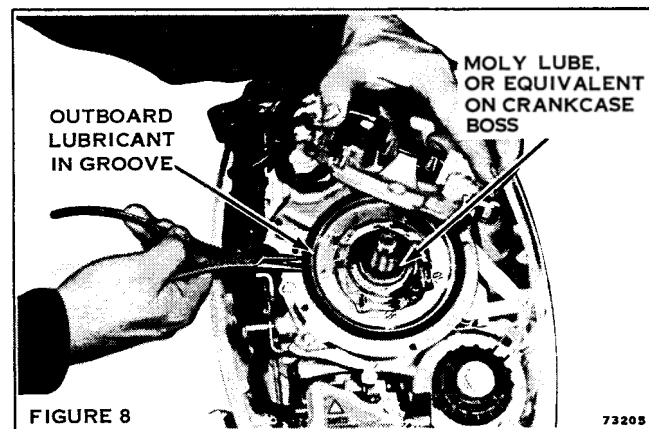


8. Insert armature plate leads in connector using insert tool P/N 322697 following procedures outlined in Section 4 of your service manual. See Figure 7.

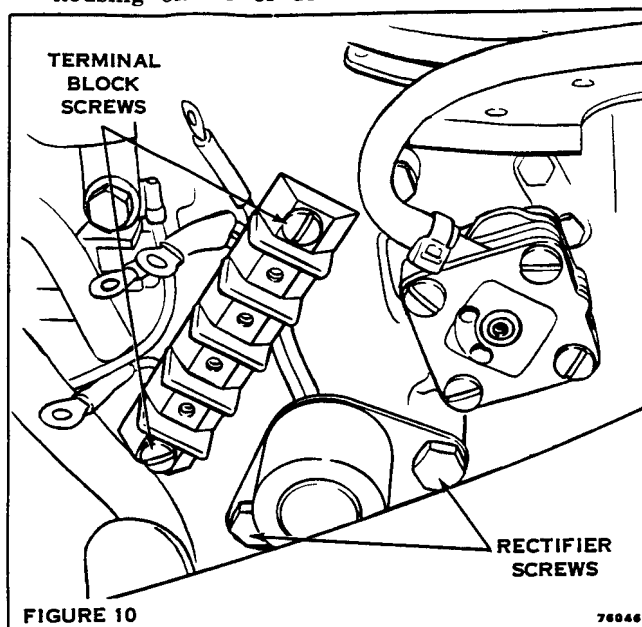


9. Apply Moly Lube, or equivalent, to crankcase boss, and Outboard Lubricant, or equivalent, to armature plate bearing internal groove. See Figure 8.

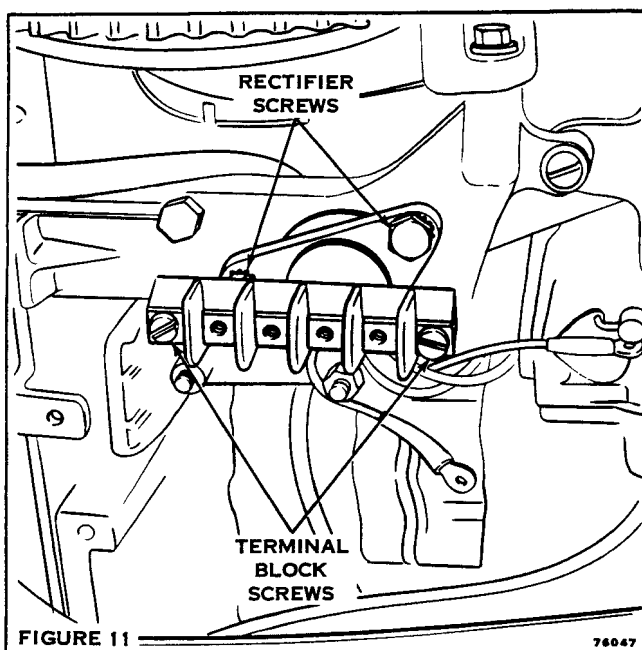
10. Install armature plate on motor. See Figure 9 and Service Manual Figure 4-34B for 9.9/15 or Figure 4-36B for 25/35 models. Join 4-pin connector and secure wires in clamps. See reference photos at end of Section 5 in your Service Manual for wiring location.



11. Install rectifier and terminal block on exhaust housing on 9.9 or 15 models. See Figure 10.



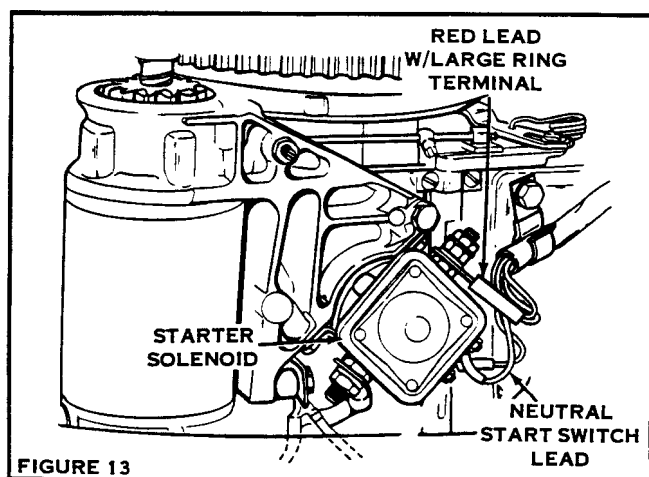
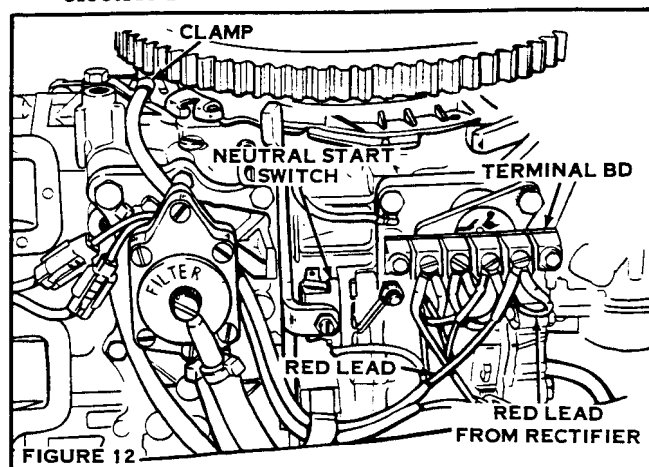
12. On 25 or 35 models install rectifier and terminal block on starboard bracket. See Figure 11.



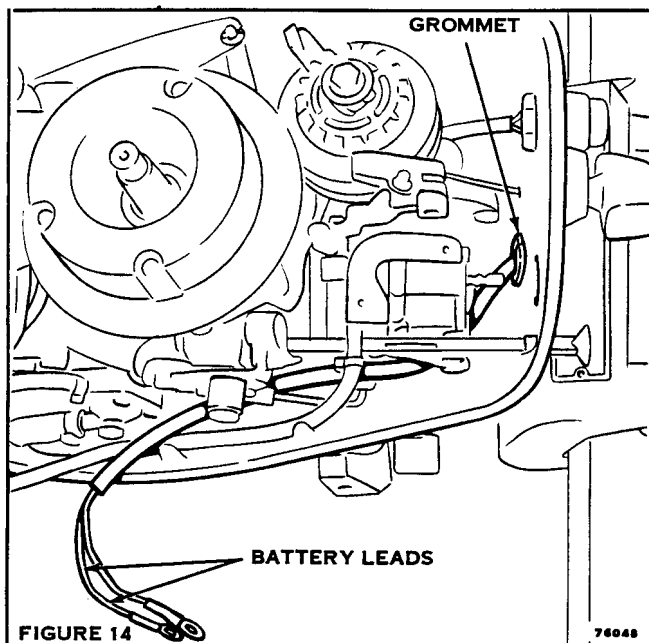
13. 9.9/15 - If you are installing, or your motor already has an electric starting kit installed, omit step 14. Discard the red battery cable supplied with this kit and connect the "extra" red starting switch lead (with the smaller ring terminal) to the terminal block. See Electric Start wiring diagram in back of the service manual.

25/35 - If you are installing, or your motor already has an electric starting kit installed, omit steps 15 and 16 and discard the red battery cable supplied with this kit. If your motor already has an electric starting kit installed, then remove the single wire connected from the neutral start switch to the starting solenoid and replace with the short two-wire cable supplied in this kit. Route wire as shown in Figures 12 and 13; utilize clamp supplied in this kit. If you

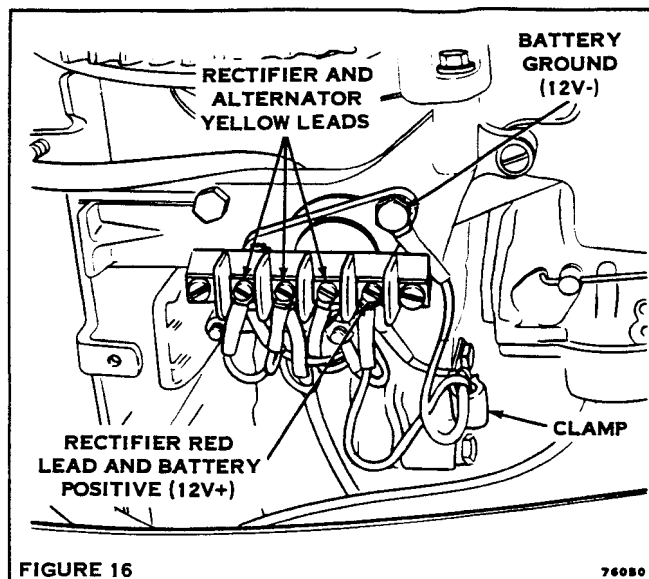
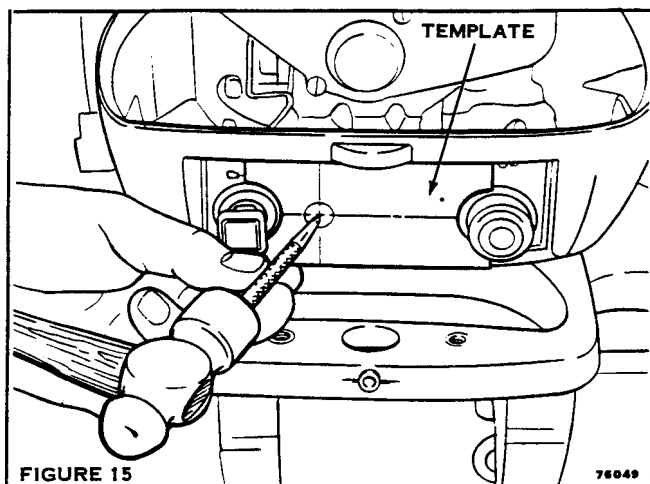
are now installing an electric start kit, then install the short two-wire cable supplied in this kit rather than the single-wire supplied in the electric start kit.



14. On 9.9 and 15 models install large grommet in lower motor cover. Insert battery leads thru grommet, routing leads around starboard side to terminal block. Connect black ground lead (12V.-) under larger (1/4-20) rectifier mounting screw. See Figures 14 and 17.



15. On 25 and 35 models, center punch and drill a 1/2" hole in control panel using template Figure 18 as shown in Figure 15.



16. On 25 and 35 models, install small grommet in drilled hole, insert battery leads, routing leads around starboard side to terminal block. Connect black battery ground lead (12V.-) under larger (1/4-20) rectifier mounting screw. See Figure 16. Install wiring clamp on crankcase screw, Figure 16.

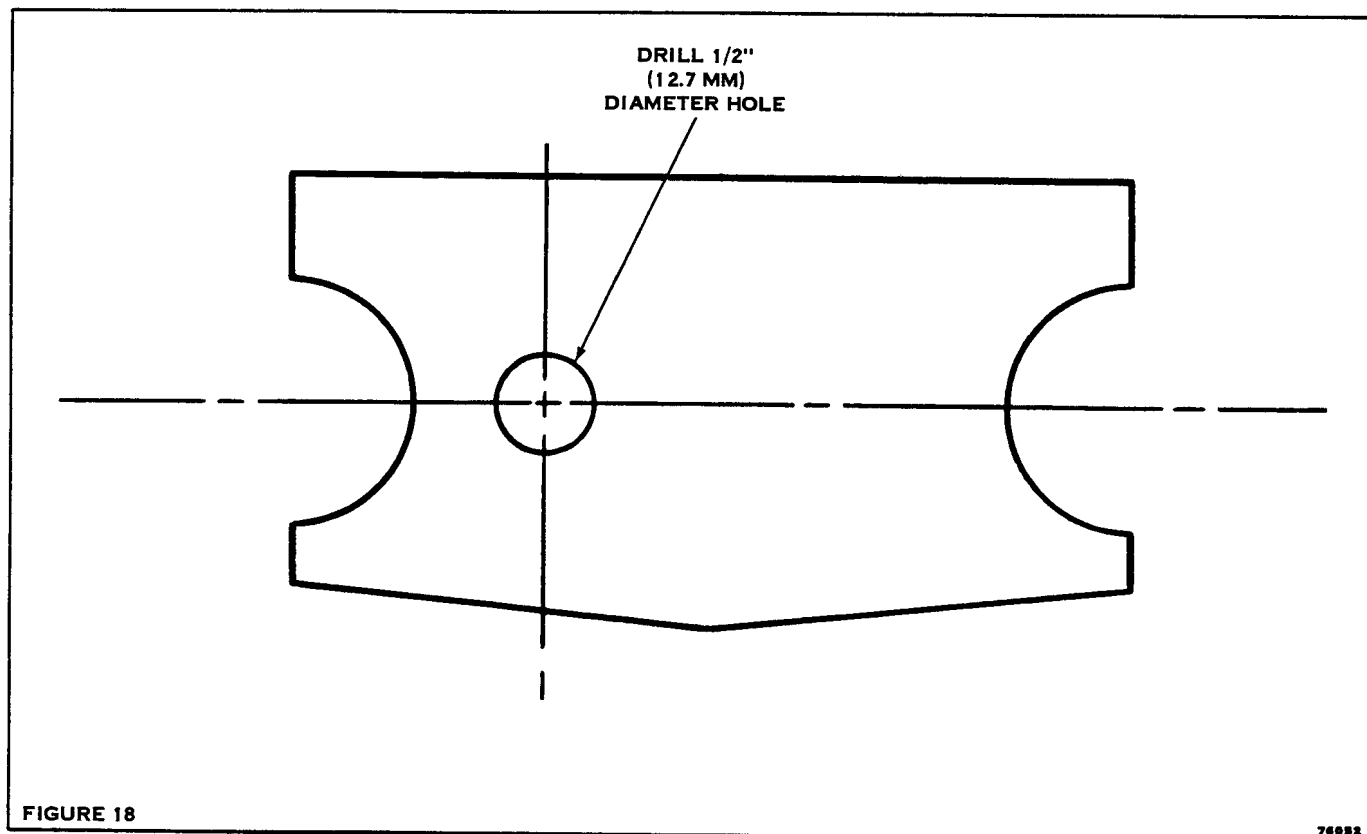
17. On all motors - Connect rectifier red lead and battery red lead (12V.+) to forward terminal block screw. See Figures 16 and 17.

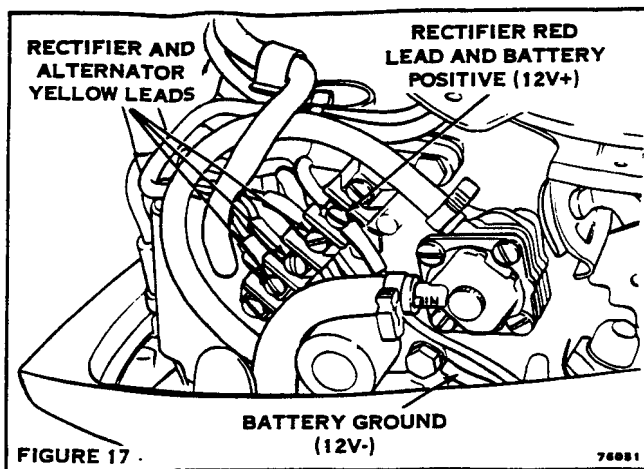
Install three rectifier and three armature plate leads to remaining three terminal block screws, matching

color codes, yellow/gray with yellow/gray, etc. See Figures 16 and 17. Coat terminals with liquid neoprene P/N 909570.

18. Clean crankshaft and flywheel tapers with Cleaning Solvent or similar solvent. Install flywheel and torque nut to 40-50 FT. LB. (54-68 N-m) on 9.9 or 15 models and 100-105 FT. LB. (136-142 N-m) on the 25 or 35 models.

19. Install manual starter, 25 and 35 models only.





20. Connect spark plug lead and run motor in test tank or on boat. On 25 and 35 models only, check motor timing as outlined in Service Manual Section 4.